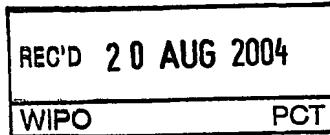




The Patent Office  
Concept House  
Cardiff Road  
Newport  
South Wales  
NP10 8QQ



I, the undersigned, being an officer duly authorised in accordance with Section 74(1) and (4) of the Deregulation & Contracting Out Act 1994, to sign and issue certificates on behalf of the Comptroller-General, hereby certify that annexed hereto is a true copy of the documents as originally filed in connection with the patent application identified therein.

In accordance with the Patents (Companies Re-registration) Rules 1982, if a company named in this certificate and any accompanying documents has re-registered under the Companies Act 1980 with the same name as that with which it was registered immediately before re-registration save for the substitution as, or inclusion as, the last part of the name of the words "public limited company" or their equivalents in Welsh, references to the name of the company in this certificate and any accompanying documents shall be treated as references to the name with which it is so re-registered.

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## PRIORITY DOCUMENT

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Signed

Dated 13 August 2004

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25 JUL 03 E825441-1 D02813  
F01/7700 0.00-6317460.4

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### Request for grant of a patent

(See the notes on the back of this form. You can also get an explanatory leaflet from the Patent Office to help you fill in this form.)

The Patent Office  
Cardiff Road  
Newport  
South Wales  
NP10 8QQ

1. Your Reference	D5880273001		
2. Patent Application number (The Patent Office will fill in this part)	0317460.4		
3. Full name, address and postcode of the or each applicant (underline all surnames)	BW Technologies Ltd Abbey Business Park Monks Walk Farnham Surrey GU9 8HT  Patents ADP Number (if you know it) <u>7977226001</u> If the applicant is a corporate body, give the country/state of its incorporation Great Britain		
4. Title of the invention	DRINKING FLUID CARRIERS		
5. Name of your agent (if you have one)	FRY HEATH & SPENCE LLP "Address for service" in the United Kingdom to which all correspondence should be sent (including the postcode)  The Gables Masseits Road Horley Surrey RH6 7DQ United Kingdom		
Patents ADP Number (if you know it)	05880273001		
6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or each of these earlier applications and (if you know it) the or each application number.	Country	Priority application number (if you know it)	Date of filing (day / month / year)
7. If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application.	Number of earlier application		Date of filing (day / month / year)
8. Is a statement of inventorship and of right to grant of a patent required in support of this request? (Answer 'Yes' if:  a) any applicant named in part 3 is not an inventor; or b) there is an inventor who is not named as an applicant; or c) any named applicant is a corporate body (See note (d))	Yes		

## -Patents Form 1/77

9. Enter the number of sheets for any of the following items you are filing with this form.  
Do not count copies of the same document.

Continuation sheets of this form 0

Description 3

Claim(s) 0

Abstract 0

Drawing(s) 1 *only*

10. If you are also filing any of the following, state how many against each item.

Priority documents 0

Translations of priority documents 0

Statement of inventorship and right to grant of a patent (*Patents Form 7/77*) 0

Request for preliminary examination and search (*Patents form 9/77*) 0

Request for substantive examination (*Patents form 10/77*) 0

Any other documents (*please specify*) 0

11.

I/We request the grant of a patent on the basis of this application

Signature

Date

*Fry Heath & Spence Ltd*

25 July 2003

12.

Name and daytime telephone number of person to contact in the United Kingdom

A.V. Fry - 01293 776880

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**Notes**

- a) If you need help to fill in this form or you have any questions, please contact the Patent Office on 0645 500505.
- b) Write your answers in capital letters using black ink or you may type them.
- c) If there is not enough space for all the relevant details on any part of this form, please continue on a separate sheet and write "see continuation sheet" in the relevant part(s). Any continuation sheet should be attached to this form.
- d) If you have answered 'Yes' Patents Form 7/77 will need to be filed.
- e) Once you have filled in the form you must remember to sign and date it.
- f) For details of the fee and ways to pay please contact the Patent Office.

**DUPPLICATE**

1

**DRINKING FLUID CARRIERS**

This Invention relates to flexible portable drinking fluid carriers and, more especially, to carriers having a flexible container encased within an outer cover produced from a flexible material able to resist contamination through contact with harmful toxins, biological agents and radioactive particles.

Portable drinking fluid carriers for *inter alia* military personnel are well known. These enable the user to have ready access to the fluid present in the container simply by operating an ON/OFF valve. Whereas these conventional carriers are impermeable, they are not able to prevent contamination of the fluid contents of the carrier in the event of chemical toxins, biological agents or radioactive particles being released into the atmosphere. In the event of such toxins, agents or particles being detected, the user has no access to drinking fluid until not only the fluid is replaced but also the carrier.

One object of this Invention is to provide a flexible cover for a flexible drinking fluid carrier which prevents contamination of its fluid contents in the presence of chemical toxins, biological agents and radioactive particles.

In one aspect, the Invention provides a portable flexible carrier for drinking fluid comprising a flexible fluid container entirely encased within an outer separable cover produced from a chemically hardened material which is impermeable to chemical toxins in liquid or gaseous form, biological agents and radioactive particles, a tube connected to an opening of the flexible container and extending beyond the confines of the cover interior through which drinking fluid can be removed by suction from the container, a conduit produced from the chemically hardened material within which the entire length of the tube is encased, an ON/OFF valve in communication with the tube to enable fluid to flow under suction

from the carrier interior to the conduit, and means for selectively sealing the cover interior and its contents from the atmosphere.

The chemically hardened material may comprise a fabric support covered by a protective complex which acts as a barrier to chemical toxins in liquid or gaseous form, biological agents and radioactive particles. One typical chemically hardened material is that marketed as 3TOX (trade mark) which is marketed by Paul Boye. In this particular material, the fabric support comprises an unwoven sheet.

The carrier may include shoulder straps to enable it to be carried on the back of the user. The cover may include a selectively sealable pouch and a sealable flap which is able to overlie the sealed end of the pouch. Sealing may be achieved through the use of strips of Velcro (Registered Trade Mark).

The invention will now be described, by way of example only, with reference to the accompanying drawing in which:

Figure 1 is a front view of a drinking fluid carrier in accordance with the invention in its closed position;

Figure 2 shows the carrier of Figure 1 in its open position; and

Figure 3 is a rear view of the carrier shown in Figures 1 and 2.

The illustrated carrier comprises a cover 1 produced from one or more sheets of chemically hardened material and an impermeable flexible drinking fluid container 2 (see Figure 2). The container includes a conventional cap 3 which can be removed to enable the container to be filled with water or other drinking fluid. A drinking tube 4 (shown in broken line in Figures 1 and 3) projects into the interior of the container. The container 2 is entirely housed within the cover 1 and the tube 4

passes through a conduit 5 which forms part of the cover 1 and is produced from the same chemically hardened material. An ON/OFF switch 6 is positioned within the tube 4 at its end remote from the cover.

The cover includes a pouch 7 for receiving the container 2. The open end of the pouch 7 is defined by a sleeve 8 which projects forwardly of the pouch. Strips 9 of sealing material (e.g. Velcro [RTM]) are positioned along the tips of the sleeve for sealing the pouch contents and interior from the atmosphere. A flap 10 is provided at the front of the cover 1. This flap is of a length which enables it to overlie the sleeve when closed to provide additional protection for the interior and contents of the cover. Strips of sealing material 11 (e.g. Velcro) are secured to the inner face of the flap 10 and the cover surface to secure the flap in place.

Shoulder straps 12 are secured to the rear of the cover to enable the carrier to be carried on the back of the user. An additional strap 14 is provided for supporting other pieces of equipment.

In use, the cover prevents any contamination of the drinking fluid present in the flexible container through exposure to chemical toxins in liquid or gaseous form, biological agents and radioactive particles which may be released into the atmosphere. Because of the cover, the suitably clad user can safely access the drinking fluid by sucking through an extension tube connected to the tube 4 and projecting through a side wall of a face mask worn by the user.

It will be appreciated that the foregoing is merely exemplary of carriers in accordance with the invention and that modifications can readily be made thereto without departing from the true scope of the invention.

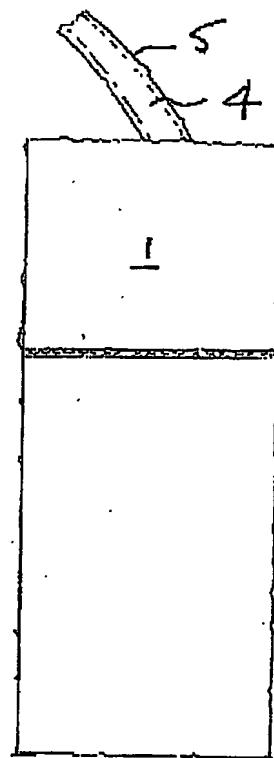


FIG. 1

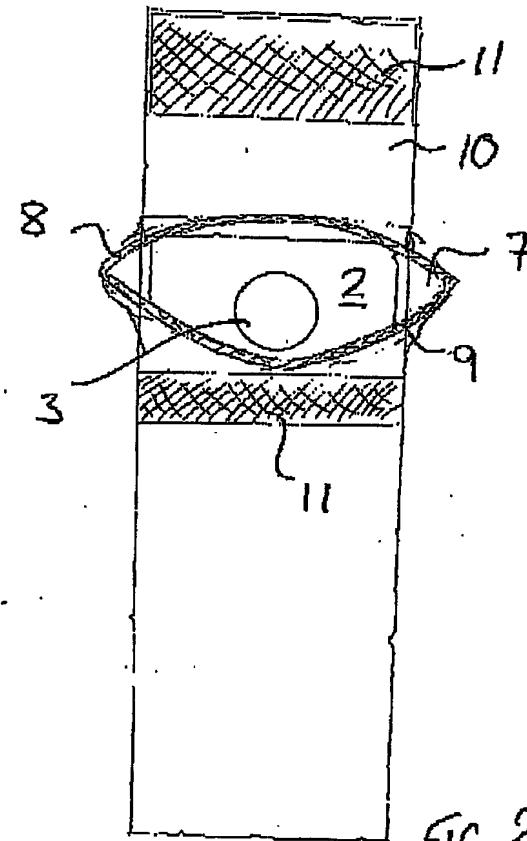


FIG. 2

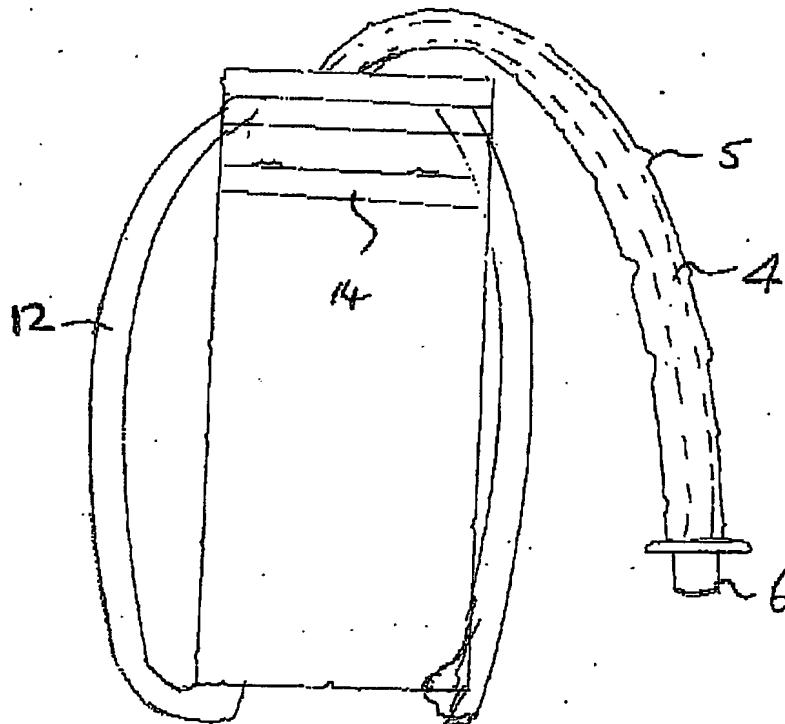


FIG. 3.

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